Statement of Basis of the Federal Operating Permit

Nucor Steel Longview LLC

Site Name: Nucor Steel Longview
Physical Location: 5400 West Loop 281
Nearest City: Longview
County: Gregg

Permit Number: O3922
Project Type: Initial Issuance

Standard Industrial Classification (SIC) Code: 3312
SIC Name: Steel Works

This Statement of Basis sets forth the legal and factual basis for the draft permit conditions in accordance with 30 TAC §122.201(a)(4). An application for initial permit issuance has been submitted in accordance with 30 TAC § 122.201. This document may include the following information:

A description of the facility/area process description;
A basis for applying permit shields;
A list of the federal regulatory applicability determinations;
A table listing the determination of applicable requirements;
A list of the New Source Review Requirements;
The rationale for periodic monitoring methods selected;
The rationale for compliance assurance methods selected;
A compliance status; and
A list of available unit attribute forms.

Prepared on: May 15, 2017

Operating Permit
Basis of Determination

Permit Area Process Description
The Longview Facility produces carbon, alloy, and specialty steel in two electric arc furnaces (EAFs). Each of these furnaces is a swing-roof top charged unit with individual combination side-draft and canopy hooding. The EAFs use the basic steel-making process with ferrous scrap, conditioning agents, and alloy additions in a batch operation beginning with melting operations. Molten steel is cast into ingots, and the ingots are conditioned before being rolled into steel plates. The steel plates are then heat-treated and cut as needed to meet customer specifications. Slag, a by-product from the steel-making process, is processed off site. The mini-mill consists of the following major processing operations: scrap handling operations, electric arc furnaces (including ladle vacuum refining), ladle pre-heating, ingot cropping and grinding, ingot warming (ingot preheating prior to rolling), plate steel rolling, plate heat treating, and flame cutting.

Operations at the plant are currently authorized under Texas Commission on Environmental Quality (TCEQ) New Source Review (NSR) Permit Number 186 dated September 9, 2016 and PSD-TX-1102 dated February 25, 2014. Additional operations are authorized by various standard exemptions (SE) and permits by rule (PBRs) under 30 TAC §106.

Ferrous scrap (or raw steel), including but not limited to pig iron and hot briquetted iron, can be received by railcar or truck at the facility. Scrap received by railcar is unloaded by crane and either is stored onsite in an area located to the northwest of the mini-mill building (SCRAPHAND) or transferred to trucks, which transport it to the charge buckets. Scrap received by truck is either unloaded to the scrap storage area or transferred to trucks for charging the furnaces. The scrap is torch-cut to sizes that can be loaded into the electric arc furnaces. The torch-cutting takes place near the scrap storage area and outside of the mini-mill building in the scrap storage yard (TORCHCUT). The scrap is transported by crane into trucks for transport to the EAF building where it is transferred into scrap buckets for top charging to the respective furnaces during the melting/refining process.

Lead-containing components are not accepted in the scrap shipments for the Longview Facility. Some scrap shipments may include scrap from motor vehicle bodies, engine blocks, oil filters, oily turnings, machine shop borings, transformers or capacitors containing polychlorinated biphenyls, chlorinated plastics, or free organic liquids. For those shipments, the Longview Facility follows a pollution prevention plan for metallic scrap selection and inspection to minimize the amount of chlorinated plastics and free organic liquids charged to the EAFs. For motor vehicle scrap, the Longview Facility follows a site-specific plan for the removal of mercury switches or receives scrap from scrap providers who participate in an EPA-approved program for the removal of mercury switches.

Operation of the EAFs includes the following primary steps: furnace charging, melting, and tapping. While the EAFs do not combust natural gas, emissions generated during these processes are mostly captured and controlled by a Wheelabrator baghouse (ARCFURVNT) with the remainder escaping uncontrolled through the roof vent (ROOFVNT).

The production of steel at the mini-mill is a batch process that begins by charging scrap metal, scrap substitutes, and other feedstocks and additives to one of the two furnaces. Once the charge buck has been filled, a crane positions the bucket over the top of the open furnace, and the material is then charged to the EAF. Since a hot metal heel is normally left in the furnace from the previous heat, the charging step creates a large plume of smoke and fume. As mentioned above, most of the emissions are captured and controlled by the EAF baghouse with the remainder escaping through the roof vent.

Charging of the EAF can and often does require a variable number of charges. Scrap metal density, availability and required chemistry can and does result in the need to charge one, two and sometimes three times for one batch or “heat” of steel production. Charges may also include alloys, limestone, fluorspar, iron substitutes, other raw ingredients and other materials for recycling depending upon the product being produced.

After the EAF has been charged, the furnace roof is pivoted to cover the furnace shell and the electrodes are lowered to begin the melting process. The heat generated by the arc and the electrical resistance of the charge melts the charge into a molten metal. The melting phase continues until the charged materials are melted to the proper temperature and chemistry. A variety of oxygen, carbon and natural gas lances may be used during the melting phase to help eliminate cold spots in the scrap charge, thereby accelerating the melting process. In addition to a variety of lances and lance variations, a comparable variation of natural gas and oxygen burners and lance burners may also be utilized in the EAF to assist in the melting process. Depending upon the specific type of scrap metal being recycled, energy costs and requirements, the desired steel chemistry and other operational conditions, a variety of lances, burners, injection systems and methodologies will be used in the steel melting process at the EAF. Emissions during melting are mostly captured and controlled by the baghouse or escape through the roof vent.

The melting step also includes a level of refining. Carbon is injected into the furnace to create a foamy slag that helps insulate the arc and retain the heat energy input to the furnace. Flux is also added in the form of lime and dolomite. The temperature of the bath is increased and the levels of some typical elements such as phosphorous, sulfur, aluminum, silicon, manganese, and carbon are reduced in the steel. Some of these elements and other impurities from the scrap form the foamy slag layer at the top of the bath. As in melting, the furnace roof remains in place, and most of the emissions are captured and vented through the baghouse.

During refining and prior to tapping operations, slag is poured from the top of the molten mixture into slag pots or directly onto the ground by tilting the furnace. The slag pot and/or molten slag are then transported off site for processing.

Once the scrap has been melted and the alloying agents and fluxing materials have been added, the EAFs are tapped (additional alloying agents and fluxing material may be added at this stage as well), and the molten steel is poured into the ladles for transfer to the ingot molds. To protect the integrity of the EAF furnace and to assist in melting the next charge, a portion of the molten steel (or heel) will remain in the furnace. Tapping completes the EAF batch process, and the furnace is then prepared to begin the process again. This preparation includes inspection, repair of the internal refractory, repair of mechanical systems and other maintenance items that cannot be completed during the production process.

The ladles used for transfer of molten steel to the ingot molds must be pre-heated prior to use by one of the four ladle pre-heaters. The pre-heaters are utilized to elevate the temperature of the ladles in order to properly transport the molten steel. Operations at the mini-mill include two horizontal ladle pre-heaters and two vertical ladle pre-heaters, which use natural gas combustion to generate heat directed at the interior of the ladle. Due to their location in the mini-mill, products of combustion are emitted through the roof vent (ROOFVNT).

The Ladle Vacuum Refining (LVR) process incorporates the addition of conditioning agents to adjust the temperature and chemical composition of the steel in accordance with each specific batch requirement. These conditioning agents and alloys are added to the molten metal prior to casting. After the molten metal is tapped into a ladle at the EAFs, the ladle is moved to the LVR station. The LVR station is equipped with a ladle cover that allows a set of electrodes to be pivoted and dropped into the cover. The cover is also equipped with a close capture hood to provide direct fume control for the LVR station. The hood is connected to the LVR baghouse for particulate control (842LVR). The LVR process utilizes two separates steps: (1) arc re-heating that is done at atmospheric pressure (no vacuum) and (2) vacuum treatment (or degassing) that is done at very low pressures (vacuum). After LVR refining is complete, the molten steel is ready for casting into ingot molds.

Once the ingots have been poured, cooled and removed from the molds, the irregular tops are cropped (or conditioned). The ingots/slabs are conditioned as needed by hand cropping or grinding. The ingots must then be re-heated and maintained at an elevated temperature prior to being rolled into steel plates. This re-heating is accomplished by placing the ingots into soaking pits. The soaking pits utilize sweet natural gas as burner fuel. The soaking pits (SOAKPITS) are not fired at full fuel rates all of the time and are only fired as needed to maintain the steel at the predetermined temperature, which is regulated by thermocouple.

The ingots are rolled into steel plates by the rolling mill when the ingots have reached the appropriate temperature for rolling. The mill is a unique design that rolls the ingots into steel plates with the ability to vary the thickness of the plate. The rolling mill utilizes a high-pressure water spray to remove mill scale from the plate as it is being rolled. The scale is captured in the water spray and flows to the rolling mill sump that is cleaned to remove the built up scale on occasion.

The rolled steel plate exits the rolling mill, and if necessary, is heat-treated in one or more of the natural-gas fired heat-treating furnaces (HTREATFUR). The steel is heat treated to achieve the physical properties as required by customer specifications as well as condition the steel at the end of the plate rolling process. The furnaces are not fired at full fuel rates all of the time and are fired as needed to maintain the steel at a predetermined temperature.

The steel plate that exits the rolling mill and heat-treating operations is not necessarily the width and length indicated by customer specifications. The steel plate is cut to the specific requirements utilizing a series of automated torch cutters that use sweet natural gas that is combined with oxygen to cut the plate to size. Emissions from torch cutting are vented through the steel mill roof vent (ROOFVNT). The steel plate may also undergo flattening in large plate presses to remove any unevenness introduced by the rolling mill and the heat-treating processes. The steel heat-heating and flame cutting steps may be repeated and intermixed as necessary depending on customer needs and the relative condition of the steel.

Natural gas fired man heaters are utilized during cold weather conditions to provide comfort heating to the personnel. The man heaters are located throughout the steel mill facility (ROOFVNT) and used on an as-needed basis. Two diesel and one gasoline tanks (837DSELTK1, 842DSELTK, and 837GASTK2) are used to store fuel for mobile equipment. Waste oil is also stored in a tank before disposal (WSTOILTK). Finally, a diesel-fired emergency generator engine (SMENG525) is located at the facility.

FOPs at Site
The "application area" consists of the emission units and that portion of the site included in the application and this permit. Multiple FOPs may be issued to a site in accordance with 30 TAC § 122.201(e). When there is only one area for the site, then the application information and permit will include all units at the site. Additional FOPs that exist at the site, if any, are listed below.

Additional FOPs: None

Major Source Pollutants
The table below specifies the pollutants for which the site is a major source:

Major Pollutants	PM, NOX, CO

Reading State of Texas's Federal Operating Permit

The Title V Federal Operating Permit (FOP) lists all state and federal air emission regulations and New Source Review (NSR) authorizations (collectively known as "applicable requirements") that apply at a particular site or permit area (in the event a site has multiple FOPs). **The FOP does not authorize new emissions or new construction activities.** The FOP begins with an introductory page which is common to all Title V permits. This page gives the details of the company, states the authority of the issuing agency, requires the company to operate in accordance with this permit and 30 Texas Administrative Code (TAC) Chapter 122, requires adherence with NSR requirements of 30 TAC Chapter 116, and finally indicates the permit number and the issuance date.

This is followed by the table of contents, which is generally composed of the following elements. Not all permits will have all of the elements.

- General Terms and Conditions
- Special Terms and Conditions

    - Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting
    - Additional Monitoring Requirements
    - New Source Review Authorization Requirements
    - Compliance Requirements
    - Protection of Stratosphere Ozone
    - Permit Location
    - Permit Shield (30 TAC § 122.148)
- Attachments
    - Applicable Requirements Summary
        - Unit Summary
        - Applicable Requirements Summary
    - Additional Monitoring Requirements
    - Permit Shield
    - New Source Review Authorization References
    - Compliance Plan
    - Alternative Requirements
- Appendix A
    - Acronym list
- Appendix B
    - Copies of major NSR authorizations

General Terms and Conditions

The General Terms and Conditions are the same and appear in all permits. The first paragraph lists the specific citations for 30 TAC Chapter 122 requirements that apply to all Title V permit holders. The second paragraph describes the requirements for record retention. The third paragraph provides details for voiding the permit, if applicable. The fourth paragraph states that the permit holder shall comply with the requirements of 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit. The fifth paragraph provides details on submission of reports required by the permit.

Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting. The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide requirements are addressed on Form OP-REQ1 and are not required to be listed separately on a OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

Other conditions. The other entries under special terms and conditions are in general terms referring to compliance with the more detailed data listed in the attachments.

Attachments

Applicable Requirements Summary. The first attachment, the Applicable Requirements Summary, has two tables, addressing unit specific requirements. The first table, the Unit Summary, includes a list of units with applicable requirements, the unit type, the applicable regulation, and the requirement driver. The intent of the requirement driver is to inform the reader that a given unit may have several different operating scenarios and the differences between those operating scenarios.

The applicable requirements summary table provides the detailed citations of the rules that apply to the various units. For each unit and operating scenario, there is an added modifier called the “index number,”

detailed citations specifying monitoring and testing requirements, recordkeeping requirements, and reporting requirements. The data for this table are based on data supplied by the applicant on the OP-SUM and various OP-UA forms.

Additional Monitoring Requirement. The next attachment includes additional monitoring the applicant must perform to ensure compliance with the applicable standard. Compliance assurance monitoring (CAM) is often required to provide a reasonable assurance of compliance with applicable emission limitations/standards for large emission units that use control devices to achieve compliance with applicant requirements. When necessary, periodic monitoring (PM) requirements are specified for certain parameters (i.e. feed rates, flow rates, temperature, fuel type and consumption, etc.) to determine if a term and condition or emission unit is operating within specified limits to control emissions. These additional monitoring approaches may be required for two reasons. First, the applicable rules do not adequately specify monitoring requirements (exception- Maximum Achievable Control Technology Standards (MACTs) generally have sufficient monitoring), and second, monitoring may be required to fill gaps in the monitoring requirements of certain applicable requirements. In situations where the NSR permit is the applicable requirement requiring extra monitoring for a specific emission unit, the preferred solution is to have the monitoring requirements in the NSR permit updated so that all NSR requirements are consolidated in the NSR permit.

Permit Shield. A permit may or may not have a permit shield, depending on whether an applicant has applied for, and justified the granting of, a permit shield. A permit shield is a special condition included in the permit document stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirement(s) or specified applicable state-only requirement(s).

New Source Review Authorization References. All activities which are related to emissions in the state of Texas must have a NSR authorization prior to beginning construction. This section lists all units in the permit and the NSR authorization that allowed the unit to be constructed or modified. Units that do not have unit specific applicable requirements other than the NSR authorization do not need to be listed in this attachment. While NSR permits are not physically a part of the Title V permit, they are legally incorporated into the Title V permit by reference. Those NSR permits whose emissions exceed certain PSD/NA thresholds must also undergo a Federal review of federally regulated pollutants in addition to review for state regulated pollutants.

Compliance Plan. A permit may have a compliance schedule attachment for listing corrective actions plans for any emission unit that is out of compliance with an applicable requirement.

Alternative Requirements. This attachment will list any alternative monitoring plans or alternative means of compliance for applicable requirements that have been approved by the EPA Administrator and/or the TCEQ Executive Director.

Appendix A

Acronym list. This attachment lists the common acronyms used when discussing the FOPs.

Appendix B
Copies of major NSR authorizations applicable to the units covered by this permit have been included in this Appendix, to ensure that all interested persons can access those authorizations.

Stationary vents subject to 30 TAC Chapter 111, Subchapter A, § 111.111(a)(1)(B) addressed in the Special Terms and Conditions

The site contains stationary vents with a flowrate less than 100,000 actual cubic feet per minute (acfm) and constructed either before or after January 31, 1972 which are limited, over a six-minute average, to 20% opacity as required by 30 TAC § 111.111(a)(1)(B). As a site may have a large number of stationary vents that fall into this category, they are not required to be listed individually in the permit's Applicable Requirement Summary. This is consistent with EPA's White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995, that states that requirements that apply identically to emission units at a site can be treated on a generic basis such as source-wide opacity limits.

Periodic monitoring is specified in Special Term and Condition 3 for stationary vents subject to 30 TAC § 111.111(a)(1)(B) to verify compliance with the 20% opacity limit. These vents are not expected to produce visible emissions during normal operation. The TCEQ evaluated the probability of these sources violating the opacity standards and determined that there is a very low potential that an opacity standard would be exceeded. It was determined that continuous monitoring for these sources is not warranted as there would be very limited environmental benefit in continuously monitoring sources that have a low potential to produce visible emissions. Therefore, the TCEQ set the visible observation monitoring frequency for these sources to once per calendar quarter.

The TCEQ has exempted vents that are not capable of producing visible emissions from periodic monitoring requirements. These vents include sources of colorless VOCs, non-fuming liquids, and other materials that cannot produce emissions that obstruct the transmission of light. Passive ventilation vents, such as plumbing vents, are also included in this category. Since this category of vents are not capable of producing opacity due to the physical or chemical characteristics of the emission source, periodic monitoring is not required as it would not yield any additional data to assure compliance with the 20% opacity standard of 30 TAC § 111.111(a)(1)(B).

In the event that visible emissions are detected, either through the quarterly observation or other credible evidence, such as observations from company personnel, the permit holder shall either report a deviation or perform a Test Method 9 observation to determine the opacity consistent with the 6-minute averaging time specified in 30 TAC § 111.111(a)(1)(B). An additional provision is included to monitor combustion sources more frequently than quarterly if alternate fuels are burned for periods greater than 24 consecutive hours. This will address possible emissions that may arise when switching fuel types.

Stationary Vents subject to 30 TAC Chapter 111 not addressed in the Special Terms and Conditions
All other stationary vents subject to 30 TAC Chapter 111 not covered in the Special Terms and Conditions are listed in the permit's Applicable Requirement Summary. The basis for the applicability determinations for these vents are listed in the Determination of Applicable Requirements table.

Federal Regulatory Applicability Determinations

The following chart summarizes the applicability of the principal air pollution regulatory programs to the permit area:

Regulatory Program	Applicability (Yes/No)
Prevention of Significant Deterioration (PSD)	Yes
Nonattainment New Source Review (NNSR)	No
Minor NSR	Yes
40 CFR Part 60 - New Source Performance Standards	Yes
40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPs)	No
40 CFR Part 63 - NESHAPs for Source Categories	Yes
Title IV (Acid Rain) of the Clean Air Act (CAA)	No
Title V (Federal Operating Permits) of the CAA	Yes
Title VI (Stratospheric Ozone Protection) of the CAA	No
CSAPR (Cross-State Air Pollution Rule)	No

Basis for Applying Permit Shields

An operating permit applicant has the opportunity to specifically request a permit shield to document that specific applicable requirements do not apply to emission units in the permit. A permit shield is a special condition stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements. A permit shield has been requested in the application for specific emission units. For the permit shield requests that have been approved, the basis of determination for regulations that the owner/operator need not comply with are located in the "Permit Shield" attachment of the permit.

Insignificant Activities

In general, units not meeting the criteria for inclusion on either Form OP-SUM or Form OP-REQ1 are not required to be addressed in the operating permit application. Examples of these types of units include, but are not limited to, the following:

1. Office activities such as photocopying, blueprint copying, and photographic processes.
2. Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.
3. Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
4. Outdoor barbecue pits, campfires, and fireplaces.
5. Laundry dryers, extractors, and tumblers processing bedding, clothing, or other fabric items generated primarily at the premises. This does not include emissions from dry cleaning systems using perchloroethylene or petroleum solvents.
6. Facilities storing only dry, sweet natural gas, including natural gas pressure regulator vents.
7. Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
8. Storage and handling of sealed portable containers, cylinders, or sealed drums.
9. Vehicle exhaust from maintenance or repair shops.
10. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).
11. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
12. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
13. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feedwater) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
14. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
15. Well cellars.
16. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
17. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal.
18. Equipment used exclusively for the melting or application of wax.
19. All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
20. Shell core and shell mold manufacturing machines.
21. Sand or investment molds with a capacity of 100 lbs. or less used for the casting of metals;

22. Equipment used for inspection of metal products.
23. Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
24. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
25. Battery recharging areas.
26. Brazing, soldering, or welding equipment.

Determination of Applicable Requirements

The tables below include the applicability determinations for the emission units, the index number(s) where applicable, and all relevant unit attribute information used to form the basis of the applicability determination. The unit attribute information is a description of the physical properties of an emission unit which is used to determine the requirements to which the permit holder must comply. For more information about the descriptions of the unit attributes specific Unit Attribute Forms may be viewed at www.tceq.texas.gov/permitting/air/nav/air_all_ua_forms.html.

A list of unit attribute forms is included at the end of this document. Some examples of unit attributes include construction date; product stored in a tank; boiler fuel type; etc.. Generally, multiple attributes are needed to determine the requirements for a given emission unit and index number. The table below lists these attributes in the column entitled "Basis of Determination." Attributes that demonstrate that an applicable requirement applies will be the factual basis for the specific citations in an applicable requirement that apply to a unit for that index number. The TCEQ Air Permits Division has developed flowcharts for determining applicability of state and federal regulations based on the unit attribute information in a Decision Support System (DSS). These flowcharts can be accessed via the internet at www.tceq.texas.gov/permitting/air/nav/air_supportsys.html. The Air Permits Division staff may also be contacted for assistance at (512) 239-1250.

The attributes for each unit and corresponding index number provide the basis for determining the specific legal citations in an applicable requirement that apply, including emission limitations or standards, monitoring, recordkeeping, and reporting. The rules were found to apply or not apply by using the unit attributes as answers to decision questions found in the flowcharts of the DSS. Some additional attributes indicate which legal citations of a rule apply. The legal citations that apply to each emission unit may be found in the Applicable Requirements Summary table of the draft permit. There may be some entries or rows of units and rules not found in the permit, or if the permit contains a permit shield, repeated in the permit shield area. These are sets of attributes that describe negative applicability, or; in other words, the reason why a potentially applicable requirement does not apply.

If applicability determinations have been made which differ from the available flowcharts, an explanation of the decisions involved in the applicability determination is specified in the column "Changes and Exceptions to RRT." If there were no exceptions to the DSS, then this column has been removed.

The draft permit includes all emission limitations or standards, monitoring, recordkeeping and reporting required by each applicable requirement. If an applicable requirement does not require monitoring, recordkeeping, or reporting, the word "None" will appear in the Applicable Requirements Summary table. If additional periodic monitoring is required for an applicable requirement, it will be explained in detail in the portion of this document entitled "Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected."

When attributes demonstrate that a unit is not subject to an applicable requirement, the applicant may request a permit shield for those items. The portion of this document entitled "Basis for Applying Permit Shields" specifies which units, if any, have a permit shield.

Operational Flexibility
When an emission unit has multiple operating scenarios, it will have a different index number associated with each operating condition. This means that units are permitted to operate under multiple operating

conditions. The applicable requirements for each operating condition are determined by a unique set of unit attributes. For example, a tank may store two different products at different points in time. The tank may, therefore, need to comply with two distinct sets of requirements, depending on the product that is stored. Both sets of requirements are included in the permit, so that the permit holder may store either product in the tank.

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
SMENG525	30 TAC Chapter 117, East Texas Combustion	R73300	Unit Type = The engine is a diesel engine.	None
SMENG525	40 CFR Part 60, Subpart IIII	60IIII	Applicability Date = Stationary CI ICE commenced construction, reconstruction, or modification on or before July 11, 2005.	None
SMENG525	40 CFR Part 60, Subpart JJJJ	60JJJJ	Construction/Reconstruction/Modification Date = The stationary spark ignition (SI) internal combustion engine (ICE) commenced construction, reconstruction or modification prior to June 12, 2006.	None
SMENG525	40 CFR Part 63, Subpart ZZZZ	63ZZZZ	HAP Source = Any stationary source of hazardous air pollutants that is not a major source as defined in 40 CFR § 63.2. Brake HP = Stationary RICE with a brake HP greater than 500 HP. Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Nonindustrial Emergency Engine = Stationary RICE is not defined in 40 CFR §63.6675 as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE. Service Type = Emergency use where the RICE does not operate or is not contractually obligated to be available for more than 15 hours per calendar year as specified in 40 CFR §63.6640(f)(2)(ii)-(iii) or does not operate as specified in 40 CFR §63.6640(f)(4)(ii). Stationary RICE Type = Compression ignition engine	None
837GASTK2	30 TAC Chapter 115, Storage of VOCs	R5112	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a submerged fill pipe True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	None
837GASTK2	40 CFR Part 60, Subpart Kb	60Kb	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)	None
842LVR	30 TAC Chapter 111, Nonagricultural Processes	R1151	Effective Stack Height = The effective stack height as calculated in the equation specified by 30 TAC §111.151(c) is not less than the standard effective stack height as determined by Table 2 specified in 30 TAC §111.151(b).	None
ARCFURVNT	30 TAC Chapter 111, Nonagricultural Processes	R1151	Effective Stack Height = The effective stack height as calculated in the equation specified by 30 TAC §111.151(c) is not less than the standard effective stack height as determined by Table 2 specified in 30 TAC §111.151(b).	None
ARCFURVNT	30 TAC Chapter 111, Visible Emissions	R1111	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a	None

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = On or before January 31, 1972 Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.	
ROOFVNT	30 TAC Chapter 111, Nonagricultural Processes	R1151	Effective Stack Height = The effective stack height as calculated in the equation specified by 30 TAC §111.151(c) is less than the standard effective stack height as determined by Table 2 specified in 30 TAC §111.151(b).	None
ROOFVNT	30 TAC Chapter 111, Visible Emissions	R1111	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = On or before January 31, 1972 Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.	None
842ARCFURD	40 CFR Part 63, Subpart YYYYY	63YYYYY-HAPS	Facility Type = Electric arc furnace. Construction date is on or before October 21, 1974. HAPS (including Hg) and PM are the pollutants based on information provided by the applicant.	The rule citations for HAPS, including Hg, were determined from an analysis of the rule text and the basis of determination.
842ARCFURD	40 CFR Part 63, Subpart YYYYY	63YYYYY-PM	Facility Type = Electric arc furnace. Construction date is on or before October 21, 1974. HAPS (including Hg) and PM are the pollutants based on information provided by the applicant.	The rule citations for PM were determined from an analysis of the rule text and the basis of determination.
842ARCFURE	40 CFR Part 63, Subpart YYYYY	63YYYYY-HAPS	Facility Type = Electric arc furnace. Construction date is on or before October 21, 1974. HAPS (including Hg) and PM are the pollutants based on information provided by the applicant.	The rule citations for HAPS, including Hg, were determined from an analysis of the rule text and the basis of determination.
842ARCFURE	40 CFR Part 63, Subpart YYYYY	63YYYYY-PM	Facility Type = Electric arc furnace. Construction date is on or before October 21, 1974. HAPS (including Hg) and PM are the pollutants based on information provided by the applicant.	The rule citations for PM were determined from an analysis of the rule text and the basis of determination.
842ARCFURD	40 CFR Part 60, Subpart AA	60AA	Facility Type = Electric arc furnace. Construction/Modification Date = On or before October 21, 1974.	None
842ARCFURE	40 CFR Part 60, Subpart AA	60AA	Facility Type = Electric arc furnace. Construction/Modification Date = On or before October 21, 1974.	None

* - The “unit attributes” or operating conditions that determine what requirements apply
** - Notes changes made to the automated results from the DSS, and a brief explanation why

NSR Versus Title V FOP

The state of Texas has two Air permitting programs, New Source Review (NSR) and Title V Federal Operating Permits. The two programs are substantially different both in intent and permit content.

NSR is a preconstruction permitting program authorized by the Texas Clean Air Act and Title I of the Federal Clean Air Act (FCAA). The processing of these permits is governed by 30 Texas Administrative Code (TAC) Chapter 116.111. The Title V Federal Operating Program is a federal program authorized under Title V of the FCAA that has been delegated to the state of Texas to administer and is governed by 30 TAC Chapter 122. The major differences between the two permitting programs are listed in the table below:

NSR Permit	Federal Operating Permit(FOP)
Issued Prior to new Construction or modification of an existing facility	For initial permit with application shield, can be issued after operation commences; significant revisions require approval prior to operation.
Authorizes air emissions	Codifies existing applicable requirements, does not authorize new emissions
Ensures issued permits are protective of the environment and human health by conducting a health effects review and that requirement for best available control technology (BACT) is implemented.	Applicable requirements listed in permit are used by the inspectors to ensure proper operation of the site as authorized. Ensures that adequate monitoring is in place to allow compliance determination with the FOP.
Up to two Public notices may be required. Opportunity for public comment and contested case hearings for some authorizations.	One public notice required. Opportunity for public comments. No contested case hearings.
Applies to all point source emissions in the state.	Applies to all major sources and some non-major sources identified by the EPA.
Applies to facilities: a portion of site or individual emission sources	One or multiple FOPs cover the entire site (consists of multiple facilities)
Permits include terms and conditions under which the applicant must construct and operate its various equipment and processes on a facility basis.	Permits include terms and conditions that specify the general operational requirements of the site; and also include codification of all applicable requirements for emission units at the site.
Opportunity for EPA review for Federal Prevention of Significant Deterioration (PSD) and Nonattainment (NA) permits for major sources.	Opportunity for EPA review, Affected states review, and a Public petition period for every FOP.
Permits have a table listing maximum emission limits for pollutants	Permit has an applicable requirements table and Periodic Monitoring (PM) / Compliance Assurance Monitoring (CAM) tables which document applicable monitoring requirements.
Permits can be altered or amended upon application by company. Permits must be issued before construction or modification of facilities can begin.	Permits can be revised through several revision processes, which provide for different levels of public notice and opportunity to comment. Changes that would be significant revisions require that a revised permit be issued before those changes can be operated.
NSR permits are issued independent of FOP requirements.	FOP are independent of NSR permits, but contain a list of all NSR permits incorporated by reference

New Source Review Requirements

Below is a list of the New Source Review (NSR) permits for the permitted area. These NSR permits are incorporated by reference into the operating permit and are enforceable under it. These permits can be found in the main TCEQ file room, located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. The Public Education Program may be contacted at 1-800-687-4040 or the Air Permits Division (APD) may be contacted at 1-512-239-1250 for help with any question.

Additionally, the site contains emission units that are permitted by rule under the requirements of 30 TAC Chapter 106, Permits by Rule. The following table specifies the permits by rule that apply to the site. All current permits by rule are contained in Chapter 106. Outdated 30 TAC Chapter 106 permits by rule may be viewed at the following Web site:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/old106list/index106.html

Outdated Standard Exemption lists may be viewed at the following Web site:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/oldselist/se_index.html

The status of air permits and applications and a link to the Air Permits Remote Document Server is located at the following Web site:

www.tceq.texas.gov/permitting/air/nav/air_status_permits.html

Prevention of Significant Deterioration (PSD) Permits	
PSD Permit No.: PSDTX1102	Issuance Date: 02/25/2014
Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 186	Issuance Date: 02/25/2014
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.102	Version No./Date: 09/04/2000
Number: 106.183	Version No./Date: 09/04/2000
Number: 106.265	Version No./Date: 09/04/2000
Number: 106.320	Version No./Date: 09/04/2000
Number: 106.371	Version No./Date: 09/04/2000
Number: 106.433	Version No./Date: 09/04/2000
Number: 106.452	Version No./Date: 09/04/2000
Number: 106.453	Version No./Date: 09/04/2000
Number: 106.454	Version No./Date: 11/01/2001
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.473	Version No./Date: 09/04/2000
Number: 106.476	Version No./Date: 09/04/2000
Number: 106.511	Version No./Date: 09/04/2000
Number: 41	Version No./Date: 06/07/1996

Emission Units and Emission Points

In air permitting terminology, any source capable of generating emissions (for example, an engine or a sandblasting area) is called an Emission Unit. For purposes of Title V, emission units are specifically listed in the operating permit when they have applicable requirements other than New Source Review (NSR), or when they are listed in the permit shield table.

The actual physical location where the emissions enter the atmosphere (for example, an engine stack or a sand-blasting yard) is called an emission point. For New Source Review preconstruction permitting purposes, every emission unit has an associated emission point. Emission limits are listed in an NSR permit, associated with an emission point. This list of emission points and emission limits per pollutant is commonly referred to as the "Maximum Allowable Emission Rate Table", or "MAERT" for short. Specifically, the MAERT lists the Emission Point Number (EPN) that identifies the emission point, followed immediately by the Source Name, identifying the emission unit that is the source of those emissions on this table.

Thus, by reference, an emission unit in a Title V operating permit is linked by reference number to an NSR authorization, and its related emission point.

Monitoring Sufficiency

Federal and state rules, 40 CFR § 70.6(a)(3)(i)(B) and 30 TAC § 122.142(c) respectively, require that each federal operating permit include additional monitoring for applicable requirements that lack periodic or instrumental monitoring (which may include recordkeeping that serves as monitoring) that yields reliable data from a relevant time period that are representative of the emission unit's compliance with the applicable emission limitation or standard. Furthermore, the federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

With the exception of any emission units listed in the Periodic Monitoring or CAM Summaries in the FOP, the TCEQ Executive Director has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements. If applicable, each emission unit that requires additional monitoring in the form of periodic monitoring or CAM is described in further detail under the Rationale for CAM/PM Methods Selected section following this paragraph.

Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected

Compliance Assurance Monitoring (CAM):

Compliance Assurance Monitoring (CAM) is a federal monitoring program established under Title 40 Code of Federal Regulations Part 64 (40 CFR Part 64).

Emission units are subject to CAM requirements if they meet the following criteria:

1. the emission unit is subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement;

2. the emission unit uses a control device to achieve compliance with the emission limitation or standard specified in the applicable requirement; and

3. the emission unit has the pre-control device potential to emit greater than or equal to the amount in tons per year for a site to be classified as a major source.

The following table(s) identify the emission unit(s) that are subject to CAM:

Unit/Group/Process Information	
ID No.: 842ARCFURD	
Control Device ID No.: ARCFURVNT	Control Device Type: Fabric Filter
Applicable Regulatory Requirement	
Name: 40 CFR Part 63, Subpart YYYYY	SOP Index No.: 63YYYYY-PM

Pollutant: PM	Main Standard: § 63.10686(b)(1)
Monitoring Information	
Indicator: Pressure Drop	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: It shall be considered a deviation if the hourly average pressure drop in the baghouse is below 1.00 inches of water column or above 14.00 inches of water column.	
Basis of CAM: It is widely practiced and accepted to control particulate emissions by use of a fabric filter. The option to measure pressure drop is indicative of control device performance since a drop in pressure may indicate holes or tears in the filter or increased pressure may indicate the blinding of bags or the filter has not been adequately cleaned. The deviation limit is based on the most recent performance test, the manufacturer's recommendations, engineering calculations, and/or historical data.	

Unit/Group/Process Information	
ID No.: 842ARCFURD	
Control Device ID No.: ARCFURVNT	Control Device Type: Fabric Filter
Applicable Regulatory Requirement	
Name: 40 CFR Part 63, Subpart YYYYY	SOP Index No.: 63YYYYY-PM
Pollutant: Opacity	Main Standard: § 63.10686(b)(2)
Monitoring Information	
Indicator: Pressure Drop	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: It shall be considered a deviation if the hourly average pressure drop in the baghouse is below 1.00 inches of water column or above 14.00 inches of water column.	
Basis of CAM: It is widely practiced and accepted to control particulate emissions by use of a fabric filter. The option to measure pressure drop is indicative of control device performance since a drop in pressure may indicate holes or tears in the filter or increased pressure may indicate the blinding of bags or the filter has not been adequately cleaned. The deviation limit is based on the most recent performance test, the manufacturer's recommendations, engineering calculations, and/or historical data.	

Unit/Group/Process Information	
ID No.: 842ARCFURE	
Control Device ID No.: ARCFURVNT	Control Device Type: Fabric Filter
Applicable Regulatory Requirement	
Name: 40 CFR Part 63, Subpart YYYYY	SOP Index No.: 63YYYYY-PM
Pollutant: PM	Main Standard: § 63.10686(b)(1)
Monitoring Information	
Indicator: Pressure Drop	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: It shall be considered a deviation if the hourly average pressure drop in the baghouse is below 1.00 inches of water column or above 14.00 inches of water column.	
Basis of CAM: It is widely practiced and accepted to control particulate emissions by use of a fabric filter. The option to measure pressure drop is indicative of control device performance since a drop in pressure may indicate holes or tears in the filter or increased pressure may indicate the blinding of bags or the filter has not been adequately cleaned. The deviation limit is based on the most recent performance test, the manufacturer's recommendations, engineering calculations, and/or historical data.	

Unit/Group/Process Information	
ID No.: 842ARCFURE	
Control Device ID No.: ARCFURVNT	Control Device Type: Fabric Filter
Applicable Regulatory Requirement	
Name: 40 CFR Part 63, Subpart YYYYY	SOP Index No.: 63YYYYY-PM
Pollutant: Opacity	Main Standard: § 63.10686(b)(2)
Monitoring Information	
Indicator: Pressure Drop	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: It shall be considered a deviation if the hourly average pressure drop in the baghouseis below 1.00 inches of water column or above 14.00 inches of water column.	
Basis of CAM: It is widely practiced and accepted to control particulate emissions by use of a fabric filter. The option to measure pressure drop is indicative of control device performance since a drop in pressure may indicate holes or tears in the filter or increased pressure may indicate the blinding of bags or the filter has not been adequately cleaned. The deviation limit is based on the most recent performance test, the manufacturer's recommendations, engineering calculations, and/or historical data.	

Unit/Group/Process Information	
ID No.: ARCFURVNT	
Control Device ID No.: ARCFURVNT	Control Device Type: Fabric Filter
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Pressure Drop	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: It shall be considered a deviation if the hourly average pressure drop in the baghouse is below 1.00 inches of water column or above 14.00 inches of water column.	
Basis of CAM: It is widely practiced and accepted to control particulate emissions by use of a fabric filter. The option to measure pressure drop is indicative of control device performance since a drop in pressure may indicate holes or tears in the filter or increased pressure may indicate the blinding of bags or the filter has not been adequately cleaned. The deviation limit is based on the most recent performance test, the manufacturer's recommendations, engineering calculations, and/or historical data.	

Unit/Group/Process Information	
ID No.: ARCFURVNT	
Control Device ID No.: ARCFURVNT	Control Device Type: Fabric Filter
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Nonagricultural Processes	SOP Index No.: R1151
Pollutant: PM	Main Standard: § 111.151(a)
Monitoring Information	
Indicator: Pressure Drop	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: It shall be considered a deviation if the hourly average pressure drop in the baghouse is below 1.00 inches of water column or above 14.00 inches of water column.	
Basis of CAM: It is widely practiced and accepted to control particulate emissions by use of a fabric filter. The option to measure pressure drop is indicative of control device performance since a drop in pressure may indicate holes or tears in the filter or increased pressure may indicate the blinding of bags or the filter has not been adequately cleaned. The deviation limit is based on the most recent performance test, the manufacturer's recommendations, engineering calculations, and/or historical data.	

Periodic Monitoring:

The Federal Clean Air Act requires that each federal operating permit include monitoring sufficient to assure compliance with the terms and conditions of the permit. Most of the emission limits and standards applicable to emission units at Title V sources include adequate monitoring to show that the units meet the limits and standards. For those requirements that do not include monitoring, or where the monitoring is not sufficient to assure compliance, the federal operating permit must include such monitoring for the emission units affected. The following emission units are subject to periodic monitoring requirements because the emission units are subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement that does not already require monitoring, or the monitoring for the applicable requirement is not sufficient to assure compliance:

Unit/Group/Process Information	
ID No.: 837GASTK2	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112
Pollutant: VOC	Main Standard: § 115.112(b)(1)
Monitoring Information	
Indicator: Structural Integrity of the Pipe	
Minimum Frequency: Emptied and degassed	
Averaging Period: n/a	
Deviation Limit: It shall be considered a deviation if the inspection indicates that the structural integrity of the fill pipe is in question, and required repairs are not completed prior to refilling the storage vessel.	
Basis of monitoring: The periodic monitoring option provided for emission units using a submerged fill pipe is location of the submerged fill pipe and structural integrity of the pipe. The location and the integrity of the pipe ensure that loading operations are controlled to prevent splash fill and reduce generated vapors; therefore, less emissions are released to the atmosphere. This approach was included as an option by the EPA in the "Periodic Monitoring Technical Reference Document" (April 1999) to monitor VOC sources.	

Unit/Group/Process Information	
ID No.: 837GASTK2	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112
Pollutant: VOC	Main Standard: § 115.112(b)(1)
Monitoring Information	
Indicator: Liquid Level	
Minimum Frequency: At the end of each unloading operation	
Averaging Period: n/a	
Deviation Limit: It shall be considered a deviation if the liquid volume falls below the liquid volume at the fill pipe.	
Basis of monitoring: The periodic monitoring option provided for emission units using a submerged fill pipe is location of the submerged fill pipe and structural integrity of the pipe. The location and the integrity of the pipe ensure that loading operations are controlled to prevent splash fill and reduce generated vapors; therefore, less emissions are released to the atmosphere. This approach was included as an option by the EPA in the "Periodic Monitoring Technical Reference Document" (April 1999) to monitor VOC sources.	

Unit/Group/Process Information	
ID No.: 842LVR	
Control Device ID No.: 842LVR	Control Device Type: Fabric Filter
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Nonagricultural Processes	SOP Index No.: R1151
Pollutant: PM	Main Standard: § 111.151(a)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: Once per week	
Averaging Period: n/a	
Deviation Limit: If visible emissions are observed, the permit holder shall report a deviation. Alternatively, within 24 hours after observing visible emissions Test Method 9 may be used to determine the opacity. An opacity greater than 5% is a deviation.	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Unit/Group/Process Information	
ID No.: ROOFVNT	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: Once per week	
Averaging Period: n/a	
Deviation Limit: If visible emissions are observed, the permit holder shall report a deviation. Alternatively, within 24 hours after observing visible emissions Test Method 9 may be used to determine the opacity. An opacity greater than 10% is a deviation.	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Unit/Group/Process Information	
ID No.: ROOFVNT	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Nonagricultural Processes	SOP Index No.: R1151
Pollutant: PM	Main Standard: § 111.151(a)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: Once per week	
Averaging Period: n/a	
Deviation Limit: If visible emissions are observed, the permit holder shall report a deviation. Alternatively, within 24 hours after observing visible emissions Test Method 9 may be used to determine the opacity. An opacity greater than 10% is a deviation.	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Compliance Review

1. In accordance with 30 TAC Chapter 60, the compliance history was reviewed on May 5, 2017.
   Site rating: N/A Company rating: Unclassified
   (High < 0.10; Satisfactory ≥ 0.10 and ≤ 55; Unsatisfactory > 55)
2. Has the permit changed on the basis of the compliance history or site/company rating? .....No

Permit reviewer notes:
Initial FOP, no compliance history. Complexity Points = 10. Repeat Violator = No.

Site/Permit Area Compliance Status Review

1. Were there any out-of-compliance units listed on Form OP-ACPS?.....No
2. Is a compliance plan and schedule included in the permit? .....No

Permit reviewer notes:
Initial FOP, no compliance history.

Available Unit Attribute Forms

OP-UA1 - Miscellaneous and Generic Unit Attributes
OP-UA2 - Stationary Reciprocating Internal Combustion Engine Attributes
OP-UA3 - Storage Tank/Vessel Attributes
OP-UA4 - Loading/Unloading Operations Attributes
OP-UA5 - Process Heater/Furnace Attributes
OP-UA6 - Boiler/Steam Generator/Steam Generating Unit Attributes
OP-UA7 - Flare Attributes
OP-UA8 - Coal Preparation Plant Attributes
OP-UA9 - Nonmetallic Mineral Process Plant Attributes
OP-UA10 - Gas Sweetening/Sulfur Recovery Unit Attributes
OP-UA11 - Stationary Turbine Attributes
OP-UA12 - Fugitive Emission Unit Attributes
OP-UA13 - Industrial Process Cooling Tower Attributes
OP-UA14 - Water Separator Attributes
OP-UA15 - Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes
OP-UA16 - Solvent Degreasing Machine Attributes
OP-UA17 - Distillation Unit Attributes
OP-UA18 - Surface Coating Operations Attributes
OP-UA19 - Wastewater Unit Attributes
OP-UA20 - Asphalt Operations Attributes
OP-UA21 - Grain Elevator Attributes
OP-UA22 - Printing Attributes
OP-UA24 - Wool Fiberglass Insulation Manufacturing Plant Attributes
OP-UA25 - Synthetic Fiber Production Attributes
OP-UA26 - Electroplating and Anodizing Unit Attributes
OP-UA27 - Nitric Acid Manufacturing Attributes
OP-UA28 - Polymer Manufacturing Attributes
OP-UA29 - Glass Manufacturing Unit Attributes
OP-UA30 - Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mill Attributes
OP-UA31 - Lead Smelting Attributes
OP-UA32 - Copper and Zinc Smelting/Brass and Bronze Production Attributes
OP-UA33 - Metallic Mineral Processing Plant Attributes
OP-UA34 - Pharmaceutical Manufacturing
OP-UA35 - Incinerator Attributes
OP-UA36 - Steel Plant Unit Attributes
OP-UA37 - Basic Oxygen Process Furnace Unit Attributes
OP-UA38 - Lead-Acid Battery Manufacturing Plant Attributes

OP-UA39 - Sterilization Source Attributes
OP-UA40 - Ferroalloy Production Facility Attributes
OP-UA41 - Dry Cleaning Facility Attributes
OP-UA42 - Phosphate Fertilizer Manufacturing Attributes
OP-UA43 - Sulfuric Acid Production Attributes
OP-UA44 - Municipal Solid Waste Landfill/Waste Disposal Site Attributes
OP-UA45 - Surface Impoundment Attributes
OP-UA46 - Epoxy Resins and Non-Nylon Polyamides Production Attributes
OP-UA47 - Ship Building and Ship Repair Unit Attributes
OP-UA48 - Air Oxidation Unit Process Attributes
OP-UA49 - Vacuum-Producing System Attributes
OP-UA50 - Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur Recovery Plant Attributes
OP-UA51 - Dryer/Kiln/Oven Attributes
OP-UA52 - Closed Vent Systems and Control Devices
OP-UA53 - Beryllium Processing Attributes
OP-UA54 - Mercury Chlor-Alkali Cell Attributes
OP-UA55 - Transfer System Attributes
OP-UA56 - Vinyl Chloride Process Attributes
OP-UA57 - Cleaning/Depainting Operation Attributes
OP-UA58 - Treatment Process Attributes
OP-UA59 - Coke By-Product Recovery Plant Attributes
OP-UA60 - Chemical Manufacturing Process Unit Attributes
OP-UA61 - Pulp, Paper, or Paperboard Producing Process Attributes
OP-UA62 - Glycol Dehydration Unit Attributes
OP-UA63 - Vegetable Oil Production Attributes